



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/731,807	12/09/2003	Charles Phillip Miller	9453	4337
27752	7590	01/24/2005	EXAMINER	
THE PROCTER & GAMBLE COMPANY INTELLECTUAL PROPERTY DIVISION WINTON HILL TECHNICAL CENTER - BOX 161 6110 CENTER HILL AVENUE CINCINNATI, OH 45224				PRETLOW, DEMETRIUS R
ART UNIT		PAPER NUMBER		
		2863		
DATE MAILED: 01/24/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

HA

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/731,807	MILLER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Demetrius R. Prelow	2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 08 December 2003.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-4 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1,5 is/are rejected.  
 7) Claim(s) 2-4,6 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 09 December 2003 is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
     Paper No(s)/Mail Date 2/23/04.

4) Interview Summary (PTO-413)  
     Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 1 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 28 of copending Application No. (10/324,368) (2003/0136495) in view of Jensen, Jr. (US 4,795,513).

10/731807

(10/324,368) (2003/0136495)

1. A method for registering an off-line produced web having pre-produced objects longitudinally spaced at a pitch interval to a converting line manufacturing disposable absorbent articles, such as diapers, pull-ups, feminine hygiene articles, and the like, or a component of a disposable absorbent article, the off-line produced web being manipulated as a controlled web in order for the pre-produced object of the controlled web to be registered in relation to a target bias position and in control	28. A method for registering an off-line produced web having pre-produced objects longitudinally spaced at a pitch interval to a converting line manufacturing disposable absorbent articles, such as diapers, pull-ups, feminine hygiene articles, and the like, or a component of a disposable absorbent article, the off-line produced web being manipulated as a controlled web in order for the pre-produced object of the controlled web to be registered in relation to a target bias position constant and in
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Art Unit: 2863

<p>automatically with the pitched unit operation, and automatically phase the target position bias, the method comprising the steps of:</p> <p>a. providing a controlled web having pre-produced objects spaced at a controlled pitch interval, wherein the controlled web being provided at a controlled velocity in a machine direction;</p> <p>b. providing an actual bias position of the pre-produced object on the controlled web by detecting the pre-produced object with <u>a sensor within a manufacturing cycle of a pitched unit operation;</u></p> <p>c. providing the target bias position at a desired position within a manufacturing cycle of the pitched unit operation;</p> <p>d. generating a correction signal based upon the actual bias position data and the target bias position constant;</p> <p>e. adjusting the controlled velocity of the controlled web in order to register the pre-produced object of the controlled web in relation to the target bias position constant;</p> <p>f. coupling the pitched unit operation with a controlled web metering point by providing a converter position reference signal fed forward from the pitched unit operation functioning as an independent axis to the controlled web metering point functioning as a dependent axis in order for the pre-produced object of the controlled web be in phase automatically with the pitched unit operation; and</p> <p><u>g. adjusting the target position in order to phase the actual position based on the controlled web bias.</u></p>	<p>phase automatically with the pitched unit operation, the method comprising the steps of:</p> <p>a. providing a controlled web having pre-produced objects spaced at a controlled pitch interval, at a controlled velocity in a machine direction;</p> <p>b. providing an actual bias position <u>data based upon the captured production images of the pre-produced objects of the controlled web and comparing the captured production images to one or more stored reference images by a machine vision system;</u></p> <p>c. providing the target bias position constant at a desired position within a manufacturing cycle of the pitched unit operation;</p> <p>d. generating a correction signal based upon the actual bias position data and the target bias position constant;</p> <p>e. adjusting the controlled velocity of the controlled web in order to register the pre-produced object of the controlled web in relation to the target bias position constant; and</p> <p>f. coupling the pitched unit operation with a controlled web metering point by providing a converter position reference signal fed forward from the pitched unit operation functioning as an independent axis to the controlled web metering point functioning as a dependent axis in order for the pre-produced object of the controlled web be in phase automatically with the pitched unit operation.</p>

Miller (2003/0136495 ) does not claim adjusting the target position in order to phase the actual position based on the controlled web bias. Jensen, Jr. (US 4,795,513) teach perforated pattern sensing means is provided at a point near the laminating nip whereby the spacing of the perforated patterns relative the laminating nip may be determined. The phasing error between an incoming perforated pattern on the paper web and an incoming target area on the film web is determined by comparison of a signal generated by the pattern sensing means to the film monitoring means signal. This determined phasing error is used to regulate the film entry nip control means whereby the tension in the film control zone is varied for a short duration to *place the film target areas in proper registry with the perforated patterns* which the examiner interprets as adjusting the target position in order to phase the actual position based on the controlled web bias.

Note Jensen, Jr. column 4, lines 8-20.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention Miller to include the teaching of Jensen, Jr. because it would regulate the film entry nip control means. Note Jensen, Jr. column 4, lines 16-17.

In reference to claim 5, Miller (2003/0136495 ) and Jensen, Jr. (US 4,795,513) do not claim the control web is processed at a constant web tension. Jensen (US4,795513) teach control web is processed at a constant web tension. Note Jensen column 8, lines 10-13.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention Miller to include the teaching of Jensen because it would accommodate use of different types of films or films of different thicknesses or widths. Note column 5, line 9-14.

### ***Claim Objections***

Claim 2 is objected to because of the following informalities:

In claim 2, lines 17-18, states --the target bias position constant-- , there is a lack of antecedent basis.

Is the --target bias position-- in line 15 the same as --the target bias position constant-- in lines 17-18 ?

Claim 3, 4 and 6 are objected to for depending on objected base claim.

Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Appropriate correction is required.

### ***Allowable Subject Matter***

Claims 2-4 and 6 would be allowed if formal matters above are resolved.

The best prior art of record particularly , Henry et al. (US 6,444,064 B1), teach a registration system and a method useful for controlling and correcting the phase and position of simultaneously advancing webs having pre-printed objects spaced at a pitch length characterized by small but significant pitch variation to a target web. However Henry et al. does not teach following claim limitations.

The primary reason for the allowance of claims 2-4 is the inclusion of the method steps of coupling the first pitched unit operation with at least one controlled web metering point by providing a converter position reference signal fed forward from the second pitched unit operation functioning as an independent axis to the controlled web metering point functioning as a dependent axis in order for the pre-produced object of the controlled web be in phase automatically with the first pitched unit operation; inferring the pre-produced object pitch from the registration control loop output and using feedforward gain to automatically adjust a target phase offset position of the second pitched unit operation in order to compensate for variations in the pre-produced object pitch and to maintain the proper phase relationship. It is these steps found in each of the claims, as it is claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Demetrius R. Pretlow whose telephone number is (703) 272-2278. The examiner can normally be reached on 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Demetrius R. Pretlow

*Demetrius R. Pretlow* 1/12/05

Patent Examiner

*John Barlow*  
John Barlow  
Supervisory Patent Examiner  
Technology Center 2800